

CLAIMS

1. A fastening device comprising:

- (a) a support member (5; 65) secured to one body (1) to be fastened;
- (b) a base member (10) secured to the other body (2) to be fastened;
- (c) an operating lever (20) having a U-shaped configuration in section and a basal end part of which is turnably connected to said base member (10) through a first shaft (31);

- (d) an arm (40; 70; 100) one end part of which is turnably connected to said support member (5; 65) through a second shaft (32) and the other end part of which is turnably connected to said basal end part of said operating lever (20) through a third shaft (33); and

- (e) a lock mechanism (50);

said operating lever (20) being turned beyond a dead point where said third shaft (33) is aligned with said first and second shafts (31; 32) in accordance with turning motion of said operating lever (20) until said operating lever (20) reaches an overlap position where said operating lever (20) is overlapped with said base member (10), said operating lever (20) being locked at said overlap position by said lock mechanism (50),

wherein said lock mechanism (50) includes a lock claw (14a) disposed at said base member (10), a lock pin (51) laid between opposite side walls (22) of said operating lever (20) and movable between an engagement position with respect to said lock claw (14a) and an engagement released position where said lock pin (51) is disengaged from said lock claw (14a), and a pin biasing member (55) received in said operating lever (20) for biasing said lock pin (51) toward said lock claw (14a) so that said lock pin (51) is kept engaged with said lock claw (14a).

2. A fastening device according to claim 1, wherein said arm (40) includes

a shaft biasing member (43) for biasing said second and third shafts (32, 33) toward each other, and said operating lever (20) is turn-biased by said shaft biasing member (43) such that said operating lever (20) is moved away from said dead point.

3. A fastening device according to claim 1, wherein a shaft biasing member (80) is disposed between said first shaft (31) and said second shaft (32) and adapted to bias said first and second shafts (31, 32) away from each other, and said operating lever (20) is turn-biased by said shaft biasing member (80) such that said operating lever (20) is moved away from said dead point.

4. A fastening device according to one of claims 1 through 3, wherein one end part of said lock pin (51) is passed through a support hole (22x) of one side wall (22) of said operating lever (20) with play, thereby said lock pin (51) is turnably supported by said support hole (22x), the other end part of said lock pin (51) is passed through a long hole (22y) formed in the other side wall (22) of said operating lever (20) and projected outside said operating lever (20) so as to serve as a handle part (51a), said lock claw (14a) is arranged proximate to the other side wall of said operating lever (20) within said operating lever (20), and said handle part (51a) of said lock pin (50) is movable between an engagement position with respect to said lock claw (14a) and an engagement released position away from said lock claw (14a), along said long hole (22y).

5. A fastening device according to one of claims 1 through 4, wherein said lock claw (14a) is projected to the opposite side of said third shaft (33), said pin biasing member (55) is composed of a tension coiled spring, one end of said tension coiled spring is hooked on said lock pin (51) and the other end is

hooked on a hooking part (33) which is disposed at said operating lever (20), said hooking part (33) is located on a basal end side of said operating lever (20) from said lock pin (51), and said lock pin (51) is biased toward said third shaft (33) by said tension coiled spring.

6. A fastening device according to claim 5, wherein said third shaft (33) is provided as said hooking part.